

**CITY OF FAIRFIELD**

**RESOLUTION NO. 2017 - 280**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FAIRFIELD AUTHORIZING  
THE CITY MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT  
BETWEEN THE CITY OF FAIRFIELD AND WEST YOST ASSOCIATES FOR THE  
NORTH BAY REGIONAL WATER TREATMENT PLANT OZONE SYSTEM  
UPGRADES ENGINEERING DESIGN PROJECT**

**WHEREAS**, the City of Fairfield has a need to upgrade the ozone system in use at the North Bay Regional Water Treatment Plant; and

**WHEREAS**, West Yost Associates is an engineering firm with highly qualified staff to perform a review of the existing ozone system and perform engineering design of the proposed upgrades; and

**WHEREAS**, staff is requesting professional engineering technical services from West Yost Associates for assistance in completing the ozone system upgrades engineering design project.

**NOW THEREFORE, THE COUNCIL OF THE CITY OF FAIRFIELD HEREBY RESOLVES:**

Section 1. The City Manager is hereby authorized and directed to execute on behalf of the City of Fairfield a Professional Services Agreement between the City of Fairfield and West Yost Associates for the North Bay Regional Water Treatment Plant Ozone System Upgrades Engineering Design Project for a total not-to-exceed fee of \$224,880.

**PASSED AND ADOPTED** this 19<sup>th</sup> day of December, 2017, by the following vote:

AYES: COUNCILMEMBERS: PRICE/TIMM/BERTANI/MOY/VACCARO

NOES: COUNCILMEMBERS: NONE

ABSENT: COUNCILMEMBERS: NONE

ABSTAIN: COUNCILMEMBERS: NONE

*How to Pass*  
MAYOR

ATTEST:  
*Karen L. Rees*  
CITY CLERK  
pw

## CONSULTANT SERVICES AGREEMENT

THIS AGREEMENT is made at Fairfield, California, as of January 3, 2018, by and between the City of Fairfield, a municipal corporation (the "CITY") and West Yost Associates ("CONSULTANT"), who agree as follows:

1) SERVICES. Subject to the terms and conditions set forth in this Agreement, CONSULTANT shall provide to the CITY the services described in Exhibit "A," which consists of the proposal submitted by CONSULTANT. CONSULTANT shall provide said services at the time, place, and in the manner specified in Exhibit "A."

2) PAYMENT. CITY shall pay CONSULTANT for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit "B." The payments specified in Exhibit "B" shall be the only payments to be made to CONSULTANT for services rendered pursuant to this Agreement. CONSULTANT shall submit all billings for said services to the CITY in the manner specified in Exhibit "B."

3) FACILITIES AND EQUIPMENT. CONSULTANT shall, at its sole cost and expense, furnish all facilities and equipment which may be required for furnishing services pursuant to this Agreement.

4) GENERAL PROVISIONS. The general provisions set forth in Exhibit "C" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the provisions set forth in Exhibit "C" shall control.

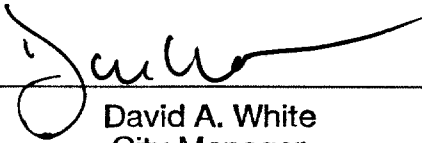
5) INSURANCE REQUIREMENTS. The insurance requirements set forth in Exhibit "D" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the requirements set forth in Exhibit "D" shall control.

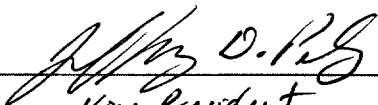
6) EXHIBITS. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.

7) TERM. This agreement shall be in effect until the scope of work is completed.

EXECUTED as of the day first above-stated.

City of Fairfield, a municipal corporation

By:   
David A. White  
City Manager  
CONSULTANT

By:   
Vice President



September 12, 2017

SENT VIA: EMAIL

Mr. Brandon Hiltman  
Water Treatment Supervisor, City of Fairfield  
North Bay Regional Water Treatment Plant  
5110 Water Works Lane  
Fairfield, CA 94533-8138

**SUBJECT: Cities of Fairfield and Vacaville North Bay Regional Water Treatment Plant  
Ozone System Improvements Design Services**

Dear Brandon:

The purpose of this letter is to present our proposal for professional services for the Cities of Fairfield and Vacaville (Cities) North Bay Regional Water Treatment Plant (NBRWTP) Ozone System Improvements Design Services (Project).

The following sections detail our proposed scope of work, estimated fee, and schedule.

### **SCOPE OF WORK**

West Yost Associates (West Yost) will provide Design Services as discussed in the following sections.

#### **Task 1. Project Management and Quality Assurance/Quality Control (QA/QC)**

##### **Project Management**

This subtask includes internal communication and documentation necessary to execute the project. It also includes initiating the project in our internal accounting system for budget tracking and quality control purposes and development of a project management plan. A summary description of work performed under each task will be included with each monthly invoice to provide written status updates to the Cities on a regular basis. The description will include a summary of the total costs to date and remaining budget. In addition, this task includes effort for management of subconsultants that will be working with West Yost on the project.

##### **QA/QC Measures**

QA/QC for this project will be managed by a senior level West Yost engineer that will not be engaged in the day-to-day execution of the project. Major deliverables will undergo QC review prior

to submission. A constructability and bid-ability review will also be conducted for the Project. The review will be coordinated by a senior member of the West Yost construction management group.

**Task 1 Deliverables: Monthly invoicing and project status updates.**

**Task 2. Workshops and Meetings**

West Yost will conduct project status update meetings or conference calls with the Cities' project manager to keep the Cities informed on the progress of the project on a regular basis.

Design Review Workshops:

West Yost will prepare agendas and meeting notes as well as participate in the following workshops:

- Project Kickoff Workshop
- Preliminary Design Review Workshop
- 50% Design Review Workshop
- 95% Design Review Workshop
- Pre-Bid Meeting

**Task 2 Deliverables: Agendas and workshop/meeting notes.**

**Task 3. Preliminary Design**

West Yost will conduct the following engineering evaluations of the Cities' ozone facilities to develop and communicate preliminary design concepts for the Project.

Review of Historical Ozone System Design and Operating Data

The purpose of this subtask is to familiarize the design team with the available ozone system design documents, operating data, and related documents that can be used to aid the design process. In addition to meeting with NBRWTP Operations and Maintenance Staff, it is anticipated that the following documents will be reviewed as part of this process:

- Up to three years of NBRWTP ozone system SCADA historian data (e.g., NBRWTP flow rate, ozone dose, ozone residual in an electronic, comma-separated or alternative easy-to-import format)
- Available prior reports and studies relevant to the design and operation of the ozone system
- Available and relevant record drawing information
- Relevant and available shop drawing information (where available)

As part of the Project Kickoff Workshop, a site visit will be conducted by the design team with NBRWTP staff to discuss current ozone system operation issues with treatment facilities that will be impacted by this project. The objective of this visit is to better understand how the NBRWTP's

ozone system can be improved in the context of both the existing ozone generators' operations and current generation of ozone generators' ozone gas concentration's likely impacts on gas mixing and dispersion in the ozone contactors.

#### Evaluation of Existing Facility Operations, Equipment, and Improvement Alternatives

Following a review of available historical design and operating data, West Yost will conduct the following evaluations:

- Pre- and Post-Ozone Contactor Operations
- Oxygen Gas Supply and Ozone Gas Pipeline Flow Rate and Control Requirements
- Projected LOX Usage and Required Storage Capacity
- Nitrogen Boost System Capacity
- Ozone Generator Room Gas Supply and Cooling Water Piping Systems
- Evaluate Destruct Unit Systems' Performance and decide if an upgrade is needed
- Suitable Replacement Ozone Generator Equipment (e.g., Manufacturers, Capacity, Quantity)
- Electrical and Control System Requirements for Modified Ozone Systems
- Budgetary Costs for Major Mechanical and Electrical Equipment

The results of the above evaluations will be presented in a Preliminary Design Technical Memorandum (TM).

#### Preliminary Design TM

Based on the results of the above evaluations, West Yost will develop recommended improvements to the NBRWTP ozone generators and pre-ozone contactors' gas transfer system. Possible improvements include, but are not limited to, the following categories:

- Replacement of Existing Ozone Generators
- Modifications to Existing Oxygen Gas Supply and Ozone Gas Pipelines and Appurtenances
- Mechanical and Structural Modifications to Existing Pre- and Post-Ozone Contactors (See Assumptions and Exclusions)
- Electrical and Control System Modifications

Descriptions of the recommended improvements, as well as preliminary design criteria and conceptual drawings, will be presented in a Preliminary Design TM for NBRWTP staff's and Cities' review and comment. Drawings are anticipated to include ozone system process and instrumentation diagrams, and conceptual mechanical and structural plans.

A preliminary opinion of probable construction cost (OPCC) including cost of construction management and engineering services during construction for the recommended improvements will also be developed and submitted with the Preliminary Design TM by early January 2018 to aid the Cities in developing their Fiscal Year 2018/2019 capital improvements budgets. This schedule may change depending on timing of data and information received from the City.

#### **Task 3 Deliverables: Draft and Final Preliminary Design TM, Preliminary OPCC**

### **Task 4. Detailed Design**

This task includes the development of construction documents for competitive contractor bidding consistent with a design-bid-build project delivery method. It is anticipated that there will be a total of three design submittals (50%, 95%, and Final). Submittal review workshops will be conducted to discuss and obtain NBRWTP staff and Cities' feedback at the 50% and 95% submittal milestones.

#### **50% Design**

The 50% Design submittal will reflect additional detail for the concepts and facilities presented in the preliminary design TM submittal. More detailed General, Civil, Structural, Mechanical, Electrical, and Instrumentation drawings will be included in the 50% design submittal. Draft technical specifications will also be prepared for project elements covered under CSI Divisions 01, 03 (if needed), and 11 through 15. An updated OPCC will be prepared based on the 50% drawings.

#### **95% Design**

The 95% Design submittal will reflect refinement of the ozone system improvements presented in previous submittals. This submittal is expected to include a mostly-complete set of drawings, and a complete set of draft technical specifications. An updated OPCC will be prepared based on the 95% drawings. Additionally, a conceptual construction schedule will be prepared to aid in the identification of allowable contract time and construction milestones.

#### **Final Design**

A Final Design submittal will be prepared based on Cities feedback on the 95% submittal. This submittal will be intended as a complete, biddable set of contract documents, and will be stamped and signed by the responsible engineer(s).

#### **Task 4 Deliverables:**

- 50% Submittal: Drawings, Selected Preliminary Technical Specifications, OPCC
- 95% Submittal: Drawings, Specifications (General and Project Specific), OPCC, Conceptual Construction Schedule
- Final Submittal: Drawings, Specifications
- All information submitted will be provided in electronic (PDF) documents
- West Yost will provide two (2) hard copies of drawings and specifications for our 50%, 95%, and Final submittals.

## **Task 5. Bid Phase Support Services**

### Pre-Bid Meeting

West Yost will participate in a pre-bid conference convened by the Cities, including an on-site “walk through” with prospective bidders, approximately two weeks prior to bid opening. It is assumed that the Cities will organize and run the meeting and that West Yost would be there to facilitate explanation of the project scope.

### Respond to Bidder Questions

West Yost will assist with responding to questions during the bid phase. It is assumed that questions will be received by and subsequent responses will be communicated through the Cities. Questions from prospective bidders that come directly to West Yost will be re-directed to the Cities for proper documentation and routing.

### Preparation of Addenda

West Yost will assist the Cities with preparing up to two addenda as appropriate to clarify, or revise the Bid Documents in response to questions and clarification requests received during the project bid phase. It is assumed that the Cities will issue addenda to prospective bidders. This scope item assumes the preparation of two addenda.

### Preparation of Conformed Documents.

West Yost will prepare conformed design documents of the construction drawings and specifications to update the construction documents to include contract addenda. The conformed documents will be provided to the Cities for use during construction.

### Task 5 Deliverables:

- Addenda to the Bid Documents (One [1] electronic [PDF] copy for each addendum)
- Conformed Documents (One [1] electronic [PDF] copy)

## **Assumptions and Exclusions**

- The ozone generator improvements project will qualify for exempt status for CEQA documentation purposes. No CEQA services are provided in this proposal.
- Cities’ standard front-end General Conditions and Specifications (Division 00 and Division 01) will be used.
- A building permit will not be required for the ozone generator improvements project.
- The Cities will secure construction period services such as construction management, materials testing, and engineering services during construction through a separate contract at a later date.

## PROPOSED BUDGET

West Yost will perform the proposed Scope of Work described above on a time and expenses basis, at the billing rates set forth in West Yost's attached Billing Rate Schedule (Attachment A), with a not-to-exceed budget of \$224,880, as shown in Table 1.

Table 1. Fee Estimate		
Task	Description	Fee, dollars
1	Project Management and QA/QC	21,746
2	Workshops and Meetings	20,878
3	Preliminary Design	50,320
4	Detailed Design	119,408
5	Bid Support Services	12,528
Total		\$224,880

Any additional services not included in this Scope of Work will be performed only after receiving written authorization and a corresponding budget augmentation.

Please do not hesitate to call me if you have any questions or need additional information.

Sincerely,

WEST YOST ASSOCIATES



Craig Thompson, PE #44224  
Principal Engineer



Greg Chung, PE #58710  
Principal-in-Charge

CMT:vw

Attachment A: 2017 Billing Rate Schedule  
Attachment B: Drawing List



# 2017 Billing Rate Schedule

(Effective January 1, 2017 through December 31, 2017)\*

POSITIONS	LABOR CHARGES (DOLLARS PER HR)
<b>ENGINEERING</b>	
Principal/Vice President	\$258
Engineering/Scientist/Geologist Manager I / II	\$237 / \$248
Principal Engineer/Scientist/Geologist I / II	\$216 / \$229
Senior Engineer/Scientist/Geologist I / II	\$193 / \$203
Associate Engineer/Scientist/Geologist I / II	\$172 / \$184
Engineer/Scientist/Geologist I / II	\$139 / \$161
Engineering Aide	\$78
Administrative I / II / III / IV	\$71 / \$89 / \$108 / \$118
<b>ENGINEERING TECHNOLOGY</b>	
Engineering Tech Manager I / II	\$244 / \$254
Principal Tech Specialist I / II	\$225 / \$235
Senior Tech Specialist I / II	\$207 / \$216
Senior GIS Analyst	\$189
GIS Analyst	\$178
Technical Specialist I / II / III / IV	\$131 / \$150 / \$169 / \$188
CAD Manager	\$150
CAD Designer I / II	\$116 / \$130
<b>CONSTRUCTION MANAGEMENT</b>	
Senior Construction Manager	\$246
Construction Manager I / II / III / IV	\$150 / \$161 / \$171 / \$214
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$130 / \$145 / \$161 / \$167
Apprentice Inspector	\$118
CM Administrative I / II	\$64 / \$86

- Technology and Communication charges including general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses will be billed at 6% of West Yost labor.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- Mileage will be billed at the current Federal Rate and Travel will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

\* This schedule is updated annually

## 2017 Billing Rate Schedule (continued)

(Effective January 1, 2017 through December 31, 2017)\*

### Equipment Charges

EQUIPMENT	BILLING RATES
Gas Detector	\$80/day
Hydrant Pressure Gage	\$10/day
Hydrant Pressure Recorder, Standard	\$40/day
Hydrant Pressure Recorder, Impulse (Transient)	\$55/day
Trimble GPS – Geo 7x	\$220/day
Vehicle	\$10/hour
Water Flow Probe Meter	\$20/day
Water Quality Multimeter	\$185/day
Well Sounder	\$30/day

\* This schedule is updated annually

## **North Bay Regional Water Treatment Plant - Ozone System Improvements**

### **Draft Drawing List**

- G-1 Title Sheet, Location & Plant Maps, List of Drawings
- G-2 Abbreviations, Legend, Piping Symbols & Pipe Schedule
- G-3 Design Criteria & Process Flow Schematic
  
- C-1 Contractor Staging and Work Areas
- C-2 Oxygen Supply, Ozone Generation, Gas Transfer and Destruct Systems - Plan
  
- S-1 Structural General Notes
- S-2 Structural Details
  
- M-1 Mechanical Details 1
- M-2 Mechanical Details 2
- M-3 Ozone Generator Building Modifications - Mechanical Plan
- M-4 Ozone Generator Building Modifications - Mechanical Sections & Details
- M-5 Ozone Generator Building Modifications - Schematic Diagram
- M-6 Ozone Injection System - Plan & Sections
- M-7 Ozone Injection System - Details
- M-8 Pre-ozone Contactor Off-Gas Ozone Destruction System - Plan & Section
  
- E-1 ELECTRICAL SYMBOLS & ABBREVIATIONS
- E-2 480V MAIN SWGR 8LVS-B ONE LINE DIAGRAM
- E-3 480V MAIN SWGR 8LVS-B ELEVATION
- E-4 MCC-8M (PRE OZONE) ONE LINE DIAGRAM
- E-5 MCC-8M (PRE OZONE) ELEVATION
- E-6 MCC-8EMB ONE LINE DIAGRAM
- E-7 MCC-8EMB ELEVATION
- E-8 OZONE PANELBOARD SCHEDULE
- E-9 CONDUIT SCHEDULE A
- E-10 CONDUIT SCHEDULE B
- E-11 MISCELLANEOUS ELEMENTARY DIAGRAM
- E-12 EXAMPLE INTERCONNECT DIAGRAM
- E-13 TYPICAL ELECTRICAL DETAILS NO. 1
- E-14 TYPICAL ELECTRICAL DETAILS NO. 2
- E-15 ELECTRICAL SITE PLAN
- E-16 OZONE GENERATOR BUILDING ELECTRICAL POWER PLAN 1
- E-17 OZONE GENERATOR BUILDING ELECTRICAL POWER PLAN 2
- E-18 OZONE GENERATOR BUILDING MCC ROOM
  
- I-1 INSTRUMENTATION SYMBOLS & ABBREVIATIONS
- I-2 OZONE GENERATION FACILITY OVERVIEW P&ID
- I-3 PRE OZONE CONTACT BASIN P&ID (TYP)
- I-4 OZONE GENERATOR P&ID (TYP)
- I-5 AUXILIARY P&ID

## **EXHIBIT "B"**

### **PAYMENT**

1) The total contract price for services rendered by CONSULTANT under this Agreement shall be for a not-to-exceed amount of \$224,880.

2) Payment shall be made to CONSULTANT on a time and materials basis, and CONSULTANT shall submit monthly invoices to the Assistant Public Works Director/Utilities for the same.

3) Any additional meetings or work required beyond that set forth in Exhibit "A" shall be mutually agreed to in writing by the CITY and CONSULTANT, and shall be billed on a time and materials basis.

## EXHIBIT "C"

### GENERAL PROVISIONS

1) INDEPENDENT CONSULTANT. At all times during the term of this Agreement, CONSULTANT shall be an independent contractor and shall not be an employee of CITY. CITY shall have the right to control CONSULTANT only insofar as the results of CONSULTANT's services rendered pursuant to this Agreement; however, CITY shall not have the right to control the means by which CONSULTANT accomplishes services rendered pursuant to this Agreement.

2) LICENSES; PERMITS; ETC. CONSULTANT represents and warrants to CITY that CONSULTANT has all licenses, permits, qualifications, and approvals of whatsoever nature which are legally required for CONSULTANT to practice CONSULTANT's profession. CONSULTANT represents and warrants to CITY that CONSULTANT shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any licenses, permits, and approvals which are legally required for CONSULTANT to practice his profession.

3) TIME. CONSULTANT shall devote such services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of CONSULTANT's obligations pursuant to this Agreement. CONSULTANT shall adhere to the Schedule of Activities as described in their Executive Summary.

4) CONSULTANT NOT AN AGENT. Except as CITY may specify in writing, CONSULTANT shall have no authority, express or implied, to act on behalf of CITY in any capacity whatsoever as an agent. CONSULTANT shall have no authority, express or implied, pursuant to this Agreement, to bind CITY to any obligation whatsoever.

5) ASSIGNMENT PROHIBITED. No party to this Agreement may assign any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.

6) PERSONNEL. CONSULTANT shall assign only competent personnel to perform services pursuant to this Agreement. In the event that CITY, in its sole discretion, at any time during the term of this Agreement, desires the removal of any person or persons assigned by CONSULTANT to perform services pursuant to this Agreement, CONSULTANT shall remove any such person immediately upon receiving notice from CITY of the desire of CITY for the removal of such person or persons.

7) STANDARD OF PERFORMANCE. CONSULTANT shall perform all services required pursuant to this Agreement. Services shall be performed in the manner and according to the standards observed by a competent practitioner of the profession in which CONSULTANT is engaged in the geographical area in which CONSULTANT practices his profession. All products which CONSULTANT delivers to CITY pursuant to this Agreement shall be prepared in a workmanlike manner, and conform to the standards of quality normally observed by a person practicing in CONSULTANT's profession. CITY shall be the sole judge as to whether the product of the CONSULTANT is satisfactory.

8) CANCELLATION OF AGREEMENT. This Agreement may be canceled at any time by the CITY at its discretion upon written notification to CONSULTANT. CONSULTANT is entitled to receive full payment for all services performed and all costs incurred up to and including the date of receipt of written notice to cease work on the project. CONSULTANT shall be entitled to no further compensation for work performed after the date of receipt of written notice to cease work. All completed and incomplete products up to the date of receipt of written notice to cease work shall become the property of CITY.

9) PRODUCTS OF CONSULTING. All products of the CONSULTANT provided under this Agreement shall be the property of the CITY.

Notwithstanding anything to the contrary in this section, the CITY hereby agrees to indemnify, defend, and hold harmless the CONSULTANT from any claims to the extent arising out of the CITY's or any third party's reuse or use of CONSULTANT's work for any project other than the project for which CONSULTANT is engaged pursuant to this Agreement, or for any use of CONSULTANT's work for this project, where the services set forth in Exhibit "A" are completed by third parties.

10) INDEMNIFY AND HOLD HARMLESS.

a) If AGREEMENT is an agreement for design professional services subject to California Civil Code § 2782.8(a) and CONSULTANT is a design professional, as defined in California Civil Code § 2782.8(c)(2), to the fullest extent allowed by law, CONSULTANT shall hold harmless, defend and indemnify the CITY, its officers, agents, employees, and volunteers from and against all claims, damages, losses, and expenses including attorneys' fees arising out of, or pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, except where caused by the active negligence, sole negligence, or willful misconduct of the CITY.

b) If AGREEMENT is not an agreement for design professional services subject to California Civil Code § 2782.8(a) or CONSULTANT is not a design professional as defined in subsection (a) above, to the fullest extent allowed by law, CONSULTANT shall indemnify, defend, and hold harmless the CITY, its officers, agents, employees and volunteers from all claims, suits, or actions of every name, kind and description, brought forth on account of injuries to or death of any person or damage to property arising from or connected with the willful misconduct, negligent acts, errors or omissions, ultra-hazardous activities, activities giving rise to strict liability, or defects in design by CONSULTANT or any person directly or indirectly employed by or acting as agent for CONSULTANT in the performance of this Agreement, including the concurrent or successive passive negligence of the CITY, its officers, agents, employees or volunteers.

It is understood that the duty of CONSULTANT to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code.

Acceptance of insurance certificates and endorsements required under this Agreement does not relieve CONSULTANT from liability under this indemnification and

hold harmless clause. This indemnification and hold harmless clause shall apply whether or not such insurance policies are determined to be applicable to any such damages or claims for damages.

CONSULTANT'S responsibility for such defense and indemnity shall survive termination or completion of this agreement for the full period of time allowed by law.

11)PROHIBITED INTERESTS. No employee of the CITY shall have any direct financial interest in this agreement. This agreement shall be voidable at the option of the CITY if this provision is violated.

12)LOCAL EMPLOYMENT POLICY. The CITY desires wherever possible, to hire qualified local residents to work on city projects. Local resident is defined as a person who resides in Solano County. The CITY encourages an active affirmative action program on the part of its contractors, consultants, and developers. When local projects require, subcontractors, contractors, consultants and developers will solicit proposals from qualified local firms where possible.

As a way of responding to the provisions of the Davis-Bacon Act and this program, contractor, consultants, and developers will be asked, to provide no more frequently than monthly, a report which lists the employee's name, job class, hours worked, salary paid, city of residence, and ethnic origin.

13)CONSULTANT NOT A PUBLIC OFFICIAL. CONSULTANT is not a "public official" for purposes of Government Code §§ 87200 et seq. CONSULTANT conducts research and arrives at his or her conclusions, advice, recommendation, or counsel independent of the control and direction of the CITY or any CITY official, other than normal contract monitoring. In addition, CONSULTANT possesses no authority with respect to any CITY decision beyond these conclusions, advice, recommendation, or counsel.

14)EMPLOYMENT DEVELOPMENT DEPARTMENT REPORTING REQUIREMENTS. When the CITY executes an agreement for or makes payment to CONSULTANT in the amount of \$600 (six hundred dollars) or more in any one calendar year, CONSULTANT shall provide the following information to CITY to comply with Employment Development Department (EDD) reporting requirements:

a) Whether CONSULTANT is doing business as a sole proprietorship, partnership, limited liability partnership, corporation, limited liability corporation, non-profit corporation or other form of organization.

b) If CONSULTANT is doing business as a sole proprietorship, CONSULTANT shall provide the full name, address and social security number or federal tax identification number of the sole proprietor.

c) If CONSULTANT is doing business as other than a sole proprietorship, CONSULTANT shall provide CONSULTANT'S federal tax identification number.

## EXHIBIT "D"

### INSURANCE REQUIREMENTS

CONSULTANT shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the CONSULTANT, its agents, representatives, or employees.

#### 1) MINIMUM SCOPE AND LIMITS OF INSURANCE

a) Commercial General Liability coverage (occurrence Form CG 00 01) with minimum limits of \$1,000,000 per occurrence for bodily injury, personal injury, products and completed operations, and property damage. If Commercial General Liability or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

b) Automobile Liability coverage (Form CA 00 01 with Code 1 – any auto) with minimum limits of \$1,000,000 per accident for bodily injury and property damage.

c) Workers' Compensation insurance as required by the State of California and Employers' Liability insurance, each in the amount of \$1,000,000 per accident for bodily injury or disease.

#### 2) INDUSTRY SPECIFIC COVERAGES

If checked below, the following insurance is also required.

☒ Professional Liability Insurance / Errors and Omissions Liability in the minimum amount of \$1,000,000 per occurrence.

☐ Pollution Liability Insurance in the minimum amount of \$1,000,000 per occurrence

☐ Garage Keepers Insurance in the minimum amount of \$1,000,000 per occurrence

☐ Fidelity / Crime / Dishonesty Bond in the minimum amount of \$\_\_\_\_\_

☐ MCS-90 Endorsement to Business Automobile insurance for transportation of hazardous materials and pollutants

☐ Builder's Risk / Course of Construction Insurance in the minimum amount of \$\_\_\_\_\_.

### 3) INSURANCE PROVISIONS

a) DEDUCTIBLES AND SELF-INSURED RETENTIONS. Any deductibles or self-insured retentions must be declared to and approved by the CITY. At the option of the CITY, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the CITY, its officers, officials, employees and volunteers; or the CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

b) The general and automobile liability policies (and if applicable, pollution liability, garage keepers liability and builder's risk policies) are to contain, or be endorsed to contain, the following provisions:

- i) The CITY, its officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of work or operations performed by or on behalf of the CONSULTANT; products and completed operations of the CONSULTANT; premises owned, occupied or used by the CONSULTANT; and automobiles owned, leased, hired or borrowed by the CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to the CITY, its officers, officials, employees or volunteers.
- ii) For any claims related to this project, the CONSULTANT'S insurance coverage shall be primary insurance as respects the CITY, its officers, officials, employees and volunteers. Any insurance or self-insured maintained by the CITY, its officers, officials, employees or volunteers shall be excess of the CONSULTANT'S insurance and shall not contribute with it.
- iii) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the CITY, its officers, officials, employees or volunteers.
- iv) The CONSULTANT'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- v) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the CITY.
- vi) The policy limits of coverage shall be made available to the full limits of the policy. The minimum limits stated above shall not serve to reduce the CONSULTANT'S policy limits of coverage. Therefore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement, or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

c) ACCEPTABILITY OF INSURER. Insurance is to be placed with insurers with a

current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the CITY.

d) VERIFICATION OF COVERAGE. CONSULTANT shall furnish the CITY with original endorsements effecting coverage required by this Exhibit D. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by the CITY or on forms equivalent to CG 20 10 11 85 subject to CITY approval. All insurance certificates and endorsements are to be received and approved by the CITY before work commences. At the request of the CITY, CONSULTANT shall provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications.

e) SUB-CONTRACTORS. CONSULTANT shall require all subcontractors to procure and maintain insurance policies subject to the requirements of Exhibit D. Failure of CONSULTANT to verify existence of sub-contractor's insurance shall not relieve CONSULTANT from any claim arising from sub-contractors work on behalf of CONSULTANT.

## CONSULTANT SERVICES AGREEMENT

THIS AGREEMENT is made at Fairfield, California, as of January 3, 2018, by and between the City of Fairfield, a municipal corporation (the "CITY") and West Yost Associates ("CONSULTANT"), who agree as follows:

1) SERVICES. Subject to the terms and conditions set forth in this Agreement, CONSULTANT shall provide to the CITY the services described in Exhibit "A," which consists of the proposal submitted by CONSULTANT. CONSULTANT shall provide said services at the time, place, and in the manner specified in Exhibit "A."

2) PAYMENT. CITY shall pay CONSULTANT for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit "B." The payments specified in Exhibit "B" shall be the only payments to be made to CONSULTANT for services rendered pursuant to this Agreement. CONSULTANT shall submit all billings for said services to the CITY in the manner specified in Exhibit "B."

3) FACILITIES AND EQUIPMENT. CONSULTANT shall, at its sole cost and expense, furnish all facilities and equipment which may be required for furnishing services pursuant to this Agreement.

4) GENERAL PROVISIONS. The general provisions set forth in Exhibit "C" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the provisions set forth in Exhibit "C" shall control.

5) INSURANCE REQUIREMENTS. The insurance requirements set forth in Exhibit "D" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the requirements set forth in Exhibit "D" shall control.

6) EXHIBITS. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.

7) TERM. This agreement shall be in effect until the scope of work is completed.

EXECUTED as of the day first above-stated.

City of Fairfield, a municipal corporation

By: \_\_\_\_\_

David A. White  
City Manager

*CEWA*

CONSULTANT

By: \_\_\_\_\_

*D. P. B.*  
Vice President



September 12, 2017

SENT VIA: EMAIL

Mr. Brandon Hiltman  
Water Treatment Supervisor, City of Fairfield  
North Bay Regional Water Treatment Plant  
5110 Water Works Lane  
Fairfield, CA 94533-8138

**SUBJECT:** Cities of Fairfield and Vacaville North Bay Regional Water Treatment Plant  
Ozone System Improvements Design Services

Dear Brandon:

The purpose of this letter is to present our proposal for professional services for the Cities of Fairfield and Vacaville (Cities) North Bay Regional Water Treatment Plant (NBRWTP) Ozone System Improvements Design Services (Project).

The following sections detail our proposed scope of work, estimated fee, and schedule.

#### **SCOPE OF WORK**

West Yost Associates (West Yost) will provide Design Services as discussed in the following sections.

#### **Task 1. Project Management and Quality Assurance/Quality Control (QA/QC)**

##### **Project Management**

This subtask includes internal communication and documentation necessary to execute the project. It also includes initiating the project in our internal accounting system for budget tracking and quality control purposes and development of a project management plan. A summary description of work performed under each task will be included with each monthly invoice to provide written status updates to the Cities on a regular basis. The description will include a summary of the total costs to date and remaining budget. In addition, this task includes effort for management of subconsultants that will be working with West Yost on the project.

##### **QA/QC Measures**

QA/QC for this project will be managed by a senior level West Yost engineer that will not be engaged in the day-to-day execution of the project. Major deliverables will undergo QC review prior

to submission. A constructability and bid-ability review will also be conducted for the Project. The review will be coordinated by a senior member of the West Yost construction management group.

**Task 1 Deliverables:** Monthly invoicing and project status updates.

## **Task 2. Workshops and Meetings**

West Yost will conduct project status update meetings or conference calls with the Cities' project manager to keep the Cities informed on the progress of the project on a regular basis.

### Design Review Workshops:

West Yost will prepare agendas and meeting notes as well as participate in the following workshops:

- Project Kickoff Workshop
- Preliminary Design Review Workshop
- 50% Design Review Workshop
- 95% Design Review Workshop
- Pre-Bid Meeting

**Task 2 Deliverables:** Agendas and workshop/meeting notes.

## **Task 3. Preliminary Design**

West Yost will conduct the following engineering evaluations of the Cities' ozone facilities to develop and communicate preliminary design concepts for the Project.

### Review of Historical Ozone System Design and Operating Data

The purpose of this subtask is to familiarize the design team with the available ozone system design documents, operating data, and related documents that can be used to aid the design process. In addition to meeting with NBRWTP Operations and Maintenance Staff, it is anticipated that the following documents will be reviewed as part of this process:

- Up to three years of NBRWTP ozone system SCADA historian data (e.g., NBRWTP flow rate, ozone dose, ozone residual in an electronic, comma-separated or alternative easy-to-import format)
- Available prior reports and studies relevant to the design and operation of the ozone system
- Available and relevant record drawing information
- Relevant and available shop drawing information (where available)

As part of the Project Kickoff Workshop, a site visit will be conducted by the design team with NBRWTP staff to discuss current ozone system operation issues with treatment facilities that will be impacted by this project. The objective of this visit is to better understand how the NBRWTP's

ozone system can be improved in the context of both the existing ozone generators' operations and current generation of ozone generators' ozone gas concentration's likely impacts on gas mixing and dispersion in the ozone contactors.

#### Evaluation of Existing Facility Operations, Equipment, and Improvement Alternatives

Following a review of available historical design and operating data, West Yost will conduct the following evaluations:

- Pre- and Post-Ozone Contactor Operations
- Oxygen Gas Supply and Ozone Gas Pipeline Flow Rate and Control Requirements
- Projected LOX Usage and Required Storage Capacity
- Nitrogen Boost System Capacity
- Ozone Generator Room Gas Supply and Cooling Water Piping Systems
- Evaluate Destruct Unit Systems' Performance and decide if an upgrade is needed
- Suitable Replacement Ozone Generator Equipment (e.g., Manufacturers, Capacity, Quantity)
- Electrical and Control System Requirements for Modified Ozone Systems
- Budgetary Costs for Major Mechanical and Electrical Equipment

The results of the above evaluations will be presented in a Preliminary Design Technical Memorandum (TM).

#### Preliminary Design TM

Based on the results of the above evaluations, West Yost will develop recommended improvements to the NBRWTP ozone generators and pre-ozone contactors' gas transfer system. Possible improvements include, but are not limited to, the following categories:

- Replacement of Existing Ozone Generators
- Modifications to Existing Oxygen Gas Supply and Ozone Gas Pipelines and Appurtenances
- Mechanical and Structural Modifications to Existing Pre- and Post-Ozone Contactors (See Assumptions and Exclusions)
- Electrical and Control System Modifications

Descriptions of the recommended improvements, as well as preliminary design criteria and conceptual drawings, will be presented in a Preliminary Design TM for NBRWTP staff's and Cities' review and comment. Drawings are anticipated to include ozone system process and instrumentation diagrams, and conceptual mechanical and structural plans.

A preliminary opinion of probable construction cost (OPCC) including cost of construction management and engineering services during construction for the recommended improvements will also be developed and submitted with the Preliminary Design TM by early January 2018 to aid the Cities in developing their Fiscal Year 2018/2019 capital improvements budgets. This schedule may change depending on timing of data and information received from the City.

#### **Task 3 Deliverables: Draft and Final Preliminary Design TM, Preliminary OPCC.**

### **Task 4. Detailed Design**

This task includes the development of construction documents for competitive contractor bidding consistent with a design-bid-build project delivery method. It is anticipated that there will be a total of three design submittals (50%, 95%, and Final). Submittal review workshops will be conducted to discuss and obtain NBRWTP staff and Cities' feedback at the 50% and 95% submittal milestones.

#### **50% Design**

The 50% Design submittal will reflect additional detail for the concepts and facilities presented in the preliminary design TM submittal. More detailed General, Civil, Structural, Mechanical, Electrical, and Instrumentation drawings will be included in the 50% design submittal. Draft technical specifications will also be prepared for project elements covered under CSI Divisions 01, 03 (if needed), and 11 through 15. An updated OPCC will be prepared based on the 50% drawings.

#### **95% Design**

The 95% Design submittal will reflect refinement of the ozone system improvements presented in previous submittals. This submittal is expected to include a mostly-complete set of drawings, and a complete set of draft technical specifications. An updated OPCC will be prepared based on the 95% drawings. Additionally, a conceptual construction schedule will be prepared to aid in the identification of allowable contract time and construction milestones.

#### **Final Design**

A Final Design submittal will be prepared based on Cities feedback on the 95% submittal. This submittal will be intended as a complete, biddable set of contract documents, and will be stamped and signed by the responsible engineer(s).

#### **Task 4 Deliverables:**

- 50% Submittal Drawings, Selected Preliminary Technical Specifications, OPCC
- 95% Submittal Drawings, Specific (General Conditions and Part 01), OPCC, Conceptual Construction Schedule
- Final Submittal Drawings, Specifications
- All interim design submittals will be provided as electronic files, folders, and
- West Yost will provide two (2) hard copies of drawings and specifications for each 50%, 95%, and Final submittals.

## **Task 5. Bid Phase Support Services**

### **Pre-Bid Meeting**

West Yost will participate in a pre-bid conference convened by the Cities, including an on-site “walk through” with prospective bidders, approximately two weeks prior to bid opening. It is assumed that the Cities will organize and run the meeting and that West Yost would be there to facilitate explanation of the project scope.

### **Respond to Bidder Questions**

West Yost will assist with responding to questions during the bid phase. It is assumed that questions will be received by and subsequent responses will be communicated through the Cities. Questions from prospective bidders that come directly to West Yost will be re-directed to the Cities for proper documentation and routing.

### **Preparation of Addenda**

West Yost will assist the Cities with preparing up to two addenda as appropriate to clarify, or revise the Bid Documents in response to questions and clarification requests received during the project bid phase. It is assumed that the Cities will issue addenda to prospective bidders. This scope item assumes the preparation of two addenda.

### **Preparation of Conformed Documents.**

West Yost will prepare conformed design documents of the construction drawings and specifications to update the construction documents to include contract addenda. The conformed documents will be provided to the Cities for use during construction.

### **Task 5 Deliverables:**

- Addenda to the Bid Documents (One [1] electronic [PDF] copy for each addendum)
- Conformed Documents (One [1] electronic [PDF] copy)

## **Assumptions and Exclusions**

- The ozone generator improvements project will qualify for exempt status for CEQA documentation purposes. No CEQA services are provided in this proposal.
- Cities’ standard front-end General Conditions and Specifications (Division 00 and Division 01) will be used.
- A building permit will not be required for the ozone generator improvements project.
- The Cities will secure construction period services such as construction management, materials testing, and engineering services during construction through a separate contract at a later date.

Mr. Brandon Hiltman  
September 12, 2017  
Page 6

## PROPOSED BUDGET

West Yost will perform the proposed Scope of Work described above on a time and expenses basis, at the billing rates set forth in West Yost's attached Billing Rate Schedule (Attachment A), with a not-to-exceed budget of \$224,880, as shown in Table 1.

Table 1. Fee Estimate		
Task	Description	Fee, dollars
1	Project Management and QA/QC	21,746
2	Workshops and Meetings	20,878
3	Preliminary Design	50,320
4	Detailed Design	119,408
5	Bid Support Services	12,528
Total		\$224,880

Any additional services not included in this Scope of Work will be performed only after receiving written authorization and a corresponding budget augmentation.

Please do not hesitate to call me if you have any questions or need additional information.

Sincerely,

WEST YOST ASSOCIATES



Craig Thompson, PE #44224  
Principal Engineer



Greg Chung, PE #58710  
Principal-in-Charge

CMT:vw

Attachment A: 2017 Billing Rate Schedule  
Attachment B: Drawing List



# 2017 Billing Rate Schedule

(Effective January 1, 2017 through December 31, 2017)\*

POSITIONS	LABOR CHARGES (DOLLARS PER HR)
<b>ENGINEERING</b>	
Principal/Vice President	\$258
Engineering/Scientist/Geologist Manager I / II	\$237 / \$248
Principal Engineer/Scientist/Geologist I / II	\$216 / \$229
Senior Engineer/Scientist/Geologist I / II	\$193 / \$203
Associate Engineer/Scientist/Geologist I / II	\$172 / \$184
Engineer/Scientist/Geologist I / II	\$139 / \$161
Engineering Aide	\$78
Administrative I / II / III / IV	\$71 / \$89 / \$108 / \$118
<b>ENGINEERING TECHNOLOGY</b>	
Engineering Tech Manager I / II	\$244 / \$254
Principal Tech Specialist I / II	\$225 / \$235
Senior Tech Specialist I / II	\$207 / \$216
Senior GIS Analyst	\$189
GIS Analyst	\$178
Technical Specialist I / II / III / IV	\$131 / \$150 / \$169 / \$188
CAD Manager	\$150
CAD Designer I / II	\$116 / \$130
<b>CONSTRUCTION MANAGEMENT</b>	
Senior Construction Manager	\$246
Construction Manager I / II / III / IV	\$150 / \$161 / \$171 / \$214
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$130 / \$145 / \$161 / \$167
Apprentice Inspector	\$118
CM Administrative I / II	\$64 / \$86

- Technology and Communication charges including general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses will be billed at 6% of West Yost labor.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- Mileage will be billed at the current Federal Rate and Travel will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

\* This schedule is updated annually

## 2017 Billing Rate Schedule (continued)

(Effective January 1, 2017 through December 31, 2017)\*

### Equipment Charges

EQUIPMENT	BILLING RATES
Gas Detector	\$80/day
Hydrant Pressure Gage	\$10/day
Hydrant Pressure Recorder, Standard	\$40/day
Hydrant Pressure Recorder, Impulse (Transient)	\$55/day
Trimble GPS – Geo 7x	\$220/day
Vehicle	\$10/hour
Water Flow Probe Meter	\$20/day
Water Quality Multimeter	\$185/day
Well Sounder	\$30/day

\* This schedule is updated annually

## North Bay Regional Water Treatment Plant - Ozone System Improvements

### Draft Drawing List

G-1	Title Sheet, Location & Plant Maps, List of Drawings
G-2	Abbreviations, Legend, Piping Symbols & Pipe Schedule
G-3	Design Criteria & Process Flow Schematic
C-1	Contractor Staging and Work Areas
C-2	Oxygen Supply, Ozone Generation, Gas Transfer and Destruct Systems - Plan
S-1	Structural General Notes
S-2	Structural Details
M-1	Mechanical Details 1
M-2	Mechanical Details 2
M-3	Ozone Generator Building Modifications - Mechanical Plan
M-4	Ozone Generator Building Modifications - Mechanical Sections & Details
M-5	Ozone Generator Building Modifications - Schematic Diagram
M-6	Ozone Injection System - Plan & Sections
M-7	Ozone Injection System - Details
M-8	Pre-ozone Contactor Off-Gas Ozone Destruction System - Plan & Section
E-1	ELECTRICAL SYMBOLS & ABBREVIATIONS
E-2	480V MAIN SWGR 8LVS ONE LINE DIAGRAM
E-3	480V MAIN SWGR 8LVS ELEVATION
E-4	MCC-8M (PRE OZONE) ONE LINE DIAGRAM
E-5	MCC-8M (PRE OZONE) ELEVATION
E-6	MCC-8EMB ONE LINE DIAGRAM
E-7	MCC-8EMB ELEVATION
E-8	OZONE PANELBOARD SCHEDULE
E-9	CONDUIT SCHEDULE A
E-10	CONDUIT SCHEDULE B
E-11	MISCELLANEOUS ELEMENTARY DIAGRAM
E-12	EXAMPLE INTERCONNECT DIAGRAM
E-13	TYPICAL ELECTRICAL DETAILS NO. 1
E-14	TYPICAL ELECTRICAL DETAILS NO. 2
E-15	ELECTRICAL SITE PLAN
E-16	OZONE GENERATOR BUILDING ELECTRICAL POWER PLAN 1
E-17	OZONE GENERATOR BUILDING ELECTRICAL POWER PLAN 2
E-18	OZONE GENERATOR BUILDING MCC ROOM
I-1	INSTRUMENTATION SYMBOLS & ABBREVIATIONS
I-2	OZONE GENERATION FACILITY OVERVIEW P&ID
I-3	PRE OZONE CONTACT BASIN P&ID (TYP)
I-4	OZONE GENERATOR P&ID (TYP)
I-5	AUXILIARY P&ID

## **EXHIBIT "B"**

### **PAYMENT**

1) The total contract price for services rendered by CONSULTANT under this Agreement shall be for a not-to-exceed amount of \$224,880.

2) Payment shall be made to CONSULTANT on a time and materials basis, and CONSULTANT shall submit monthly invoices to the Assistant Public Works Director/Utilities for the same.

3) Any additional meetings or work required beyond that set forth in Exhibit "A" shall be mutually agreed to in writing by the CITY and CONSULTANT, and shall be billed on a time and materials basis.

## EXHIBIT "C"

### GENERAL PROVISIONS

1) INDEPENDENT CONSULTANT. At all times during the term of this Agreement, CONSULTANT shall be an independent contractor and shall not be an employee of CITY. CITY shall have the right to control CONSULTANT only insofar as the results of CONSULTANT's services rendered pursuant to this Agreement; however, CITY shall not have the right to control the means by which CONSULTANT accomplishes services rendered pursuant to this Agreement.

2) LICENSES, PERMITS, ETC. CONSULTANT represents and warrants to CITY that CONSULTANT has all licenses, permits, qualifications, and approvals of whatsoever nature which are legally required for CONSULTANT to practice CONSULTANT's profession. CONSULTANT represents and warrants to CITY that CONSULTANT shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any licenses, permits, and approvals which are legally required for CONSULTANT to practice his profession.

3) TIME. CONSULTANT shall devote such services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of CONSULTANT's obligations pursuant to this Agreement. CONSULTANT shall adhere to the Schedule of Activities as described in their Executive Summary.

4) CONSULTANT NOT AN AGENT. Except as CITY may specify in writing, CONSULTANT shall have no authority, express or implied, to act on behalf of CITY in any capacity whatsoever as an agent. CONSULTANT shall have no authority, express or implied, pursuant to this Agreement, to bind CITY to any obligation whatsoever.

5) ASSIGNMENT PROHIBITED. No party to this Agreement may assign any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.

6) PERSONNEL. CONSULTANT shall assign only competent personnel to perform services pursuant to this Agreement. In the event that CITY, in its sole discretion, at any time during the term of this Agreement, desires the removal of any person or persons assigned by CONSULTANT to perform services pursuant to this Agreement, CONSULTANT shall remove any such person immediately upon receiving notice from CITY of the desire of CITY for the removal of such person or persons.

7) STANDARD OF PERFORMANCE. CONSULTANT shall perform all services required pursuant to this Agreement. Services shall be performed in the manner and according to the standards observed by a competent practitioner of the profession in which CONSULTANT is engaged in the geographical area in which CONSULTANT practices his profession. All products which CONSULTANT delivers to CITY pursuant to this Agreement shall be prepared in a workmanlike manner, and conform to the standards of quality normally observed by a person practicing in CONSULTANT's profession. CITY shall be the sole judge as to whether the product of the CONSULTANT is satisfactory.

8) CANCELLATION OF AGREEMENT. This Agreement may be canceled at any time by the CITY at its discretion upon written notification to CONSULTANT. CONSULTANT is entitled to receive full payment for all services performed and all costs incurred up to and including the date of receipt of written notice to cease work on the project. CONSULTANT shall be entitled to no further compensation for work performed after the date of receipt of written notice to cease work. All completed and incomplete products up to the date of receipt of written notice to cease work shall become the property of CITY.

9) PRODUCTS OF CONSULTING. All products of the CONSULTANT provided under this Agreement shall be the property of the CITY.

Notwithstanding anything to the contrary in this section, the CITY hereby agrees to indemnify, defend, and hold harmless the CONSULTANT from any claims to the extent arising out of the CITY's or any third party's reuse or use of CONSULTANT's work for any project other than the project for which CONSULTANT is engaged pursuant to this Agreement, or for any use of CONSULTANT's work for this project, where the services set forth in Exhibit "A" are completed by third parties.

10) INDEMNIFY AND HOLD HARMLESS.

a) If AGREEMENT is an agreement for design professional services subject to California Civil Code § 2782.8(a) and CONSULTANT is a design professional, as defined in California Civil Code § 2782.8(c)(2), to the fullest extent allowed by law, CONSULTANT shall hold harmless, defend and indemnify the CITY, its officers, agents, employees, and volunteers from and against all claims, damages, losses, and expenses including attorneys' fees arising out of, or pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, except where caused by the active negligence, sole negligence, or willful misconduct of the CITY.

b) If AGREEMENT is not an agreement for design professional services subject to California Civil Code § 2782.8(a) or CONSULTANT is not a design professional as defined in subsection (a) above, to the fullest extent allowed by law, CONSULTANT shall indemnify, defend, and hold harmless the CITY, its officers, agents, employees and volunteers from all claims, suits, or actions of every name, kind and description, brought forth on account of injuries to or death of any person or damage to property arising from or connected with the willful misconduct, negligent acts, errors or omissions, ultra-hazardous activities, activities giving rise to strict liability, or defects in design by CONSULTANT or any person directly or indirectly employed by or acting as agent for CONSULTANT in the performance of this Agreement, including the concurrent or successive passive negligence of the CITY, its officers, agents, employees or volunteers.

It is understood that the duty of CONSULTANT to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code.

Acceptance of insurance certificates and endorsements required under this Agreement does not relieve CONSULTANT from liability under this indemnification and

hold harmless clause. This indemnification and hold harmless clause shall apply whether or not such insurance policies are determined to be applicable to any such damages or claims for damages.

CONSULTANT'S responsibility for such defense and indemnity shall survive termination or completion of this agreement for the full period of time allowed by law.

11)PROHIBITED INTERESTS. No employee of the CITY shall have any direct financial interest in this agreement. This agreement shall be voidable at the option of the CITY if this provision is violated.

12)LOCAL EMPLOYMENT POLICY. The CITY desires wherever possible, to hire qualified local residents to work on city projects. Local resident is defined as a person who resides in Solano County. The CITY encourages an active affirmative action program on the part of its contractors, consultants, and developers. When local projects require, subcontractors, contractors, consultants and developers will solicit proposals from qualified local firms where possible.

As a way of responding to the provisions of the Davis-Bacon Act and this program, contractor, consultants, and developers will be asked, to provide no more frequently than monthly, a report which lists the employee's name, job class, hours worked, salary paid, city of residence, and ethnic origin.

13)CONSULTANT NOT A PUBLIC OFFICIAL. CONSULTANT is not a "public official" for purposes of Government Code §§ 87200 et seq. CONSULTANT conducts research and arrives at his or her conclusions, advice, recommendation, or counsel independent of the control and direction of the CITY or any CITY official, other than normal contract monitoring. In addition, CONSULTANT possesses no authority with respect to any CITY decision beyond these conclusions, advice, recommendation, or counsel.

14)EMPLOYMENT DEVELOPMENT DEPARTMENT REPORTING REQUIREMENTS. When the CITY executes an agreement for or makes payment to CONSULTANT in the amount of \$600 (six hundred dollars) or more in any one calendar year, CONSULTANT shall provide the following information to CITY to comply with Employment Development Department (EDD) reporting requirements:

a) Whether CONSULTANT is doing business as a sole proprietorship, partnership, limited liability partnership, corporation, limited liability corporation, non-profit corporation or other form of organization.

b) If CONSULTANT is doing business as a sole proprietorship, CONSULTANT shall provide the full name, address and social security number or federal tax identification number of the sole proprietor.

c) If CONSULTANT is doing business as other than a sole proprietorship, CONSULTANT shall provide CONSULTANT'S federal tax identification number.

## EXHIBIT "D"

### INSURANCE REQUIREMENTS

CONSULTANT shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the CONSULTANT, its agents, representatives, or employees.

#### 1) MINIMUM SCOPE AND LIMITS OF INSURANCE

a) Commercial General Liability coverage (occurrence Form CG 00 01) with minimum limits of \$1,000,000 per occurrence for bodily injury, personal injury, products and completed operations, and property damage. If Commercial General Liability or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

b) Automobile Liability coverage (Form CA 00 01 with Code 1 – any auto) with minimum limits of \$1,000,000 per accident for bodily injury and property damage.

c) Workers' Compensation insurance as required by the State of California and Employers' Liability insurance, each in the amount of \$1,000,000 per accident for bodily injury or disease.

#### 2) INDUSTRY SPECIFIC COVERAGES

If checked below, the following insurance is also required.

☒ Professional Liability Insurance / Errors and Omissions Liability in the minimum amount of \$1,000,000 per occurrence.

☐ Pollution Liability Insurance in the minimum amount of \$1,000,000 per occurrence

☐ Garage Keepers Insurance in the minimum amount of \$1,000,000 per occurrence

☐ Fidelity / Crime / Dishonesty Bond in the minimum amount of \$ \_\_\_\_\_

☐ MCS-90 Endorsement to Business Automobile insurance for transportation of hazardous materials and pollutants

☐ Builder's Risk / Course of Construction Insurance in the minimum amount of \$ \_\_\_\_\_.

### 3) INSURANCE PROVISIONS

a) DEDUCTIBLES AND SELF-INSURED RETENTIONS. Any deductibles or self-insured retentions must be declared to and approved by the CITY. At the option of the CITY, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the CITY, its officers, officials, employees and volunteers; or the CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

b) The general and automobile liability policies (and if applicable, pollution liability, garage keepers liability and builder's risk policies) are to contain, or be endorsed to contain, the following provisions:

- i) The CITY, its officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of work or operations performed by or on behalf of the CONSULTANT; products and completed operations of the CONSULTANT; premises owned, occupied or used by the CONSULTANT; and automobiles owned, leased, hired or borrowed by the CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to the CITY, its officers, officials, employees or volunteers.
- ii) For any claims related to this project, the CONSULTANT'S insurance coverage shall be primary insurance as respects the CITY, its officers, officials, employees and volunteers. Any insurance or self-insured maintained by the CITY, its officers, officials, employees or volunteers shall be excess of the CONSULTANT'S insurance and shall not contribute with it.
- iii) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the CITY, its officers, officials, employees or volunteers.
- iv) The CONSULTANT'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- v) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the CITY.
- vi) The policy limits of coverage shall be made available to the full limits of the policy. The minimum limits stated above shall not serve to reduce the CONSULTANT'S policy limits of coverage. Therefore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement, or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

c) ACCEPTABILITY OF INSURER. Insurance is to be placed with insurers with a

current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the CITY.

d) VERIFICATION OF COVERAGE. CONSULTANT shall furnish the CITY with original endorsements effecting coverage required by this Exhibit D. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by the CITY or on forms equivalent to CG 20 10 11 85 subject to CITY approval. All insurance certificates and endorsements are to be received and approved by the CITY before work commences. At the request of the CITY, CONSULTANT shall provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications.

e) SUB-CONTRACTORS. CONSULTANT shall require all subcontractors to procure and maintain insurance policies subject to the requirements of Exhibit D. Failure of CONSULTANT to verify existence of sub-contractor's insurance shall not relieve CONSULTANT from any claim arising from sub-contractors work on behalf of CONSULTANT.

## CONSULTANT SERVICES AGREEMENT

THIS AGREEMENT is made at Fairfield, California, as of January 3, 2018, by and between the City of Fairfield, a municipal corporation (the "CITY") and West Yost Associates ("CONSULTANT"), who agree as follows:

1) SERVICES. Subject to the terms and conditions set forth in this Agreement, CONSULTANT shall provide to the CITY the services described in Exhibit "A," which consists of the proposal submitted by CONSULTANT. CONSULTANT shall provide said services at the time, place, and in the manner specified in Exhibit "A."

2) PAYMENT. CITY shall pay CONSULTANT for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit "B." The payments specified in Exhibit "B" shall be the only payments to be made to CONSULTANT for services rendered pursuant to this Agreement. CONSULTANT shall submit all billings for said services to the CITY in the manner specified in Exhibit "B."

3) FACILITIES AND EQUIPMENT. CONSULTANT shall, at its sole cost and expense, furnish all facilities and equipment which may be required for furnishing services pursuant to this Agreement.

4) GENERAL PROVISIONS. The general provisions set forth in Exhibit "C" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the provisions set forth in Exhibit "C" shall control.

5) INSURANCE REQUIREMENTS. The insurance requirements set forth in Exhibit "D" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the requirements set forth in Exhibit "D" shall control.

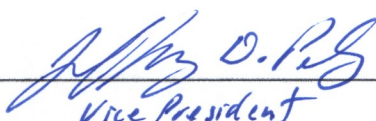
6) EXHIBITS. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.

7) TERM. This agreement shall be in effect until the scope of work is completed.

EXECUTED as of the day first above-stated.

City of Fairfield, a municipal corporation

By:   
David A. White  
City Manager  
CONSULTANT

By:   
Vice President



September 12, 2017

SENT VIA: EMAIL

Mr. Brandon Hiltman  
Water Treatment Supervisor, City of Fairfield  
North Bay Regional Water Treatment Plant  
5110 Water Works Lane  
Fairfield, CA 94533-8138

**SUBJECT:** Cities of Fairfield and Vacaville North Bay Regional Water Treatment Plant  
Ozone System Improvements Design Services

Dear Brandon:

The purpose of this letter is to present our proposal for professional services for the Cities of Fairfield and Vacaville (Cities) North Bay Regional Water Treatment Plant (NBRWTP) Ozone System Improvements Design Services (Project).

The following sections detail our proposed scope of work, estimated fee, and schedule.

### **SCOPE OF WORK**

West Yost Associates (West Yost) will provide Design Services as discussed in the following sections.

#### **Task 1. Project Management and Quality Assurance/Quality Control (QA/QC)**

##### Project Management

This subtask includes internal communication and documentation necessary to execute the project. It also includes initiating the project in our internal accounting system for budget tracking and quality control purposes and development of a project management plan. A summary description of work performed under each task will be included with each monthly invoice to provide written status updates to the Cities on a regular basis. The description will include a summary of the total costs to date and remaining budget. In addition, this task includes effort for management of subconsultants that will be working with West Yost on the project.

##### QA/QC Measures

QA/QC for this project will be managed by a senior level West Yost engineer that will not be engaged in the day-to-day execution of the project. Major deliverables will undergo QC review prior

to submission. A constructability and bid-ability review will also be conducted for the Project. The review will be coordinated by a senior member of the West Yost construction management group.

**Task 1 Deliverables:** Monthly invoicing and project status updates.

## **Task 2. Workshops and Meetings**

West Yost will conduct project status update meetings or conference calls with the Cities' project manager to keep the Cities informed on the progress of the project on a regular basis.

### Design Review Workshops:

West Yost will prepare agendas and meeting notes as well as participate in the following workshops:

- Project Kickoff Workshop
- Preliminary Design Review Workshop
- 50% Design Review Workshop
- 95% Design Review Workshop
- Pre-Bid Meeting

**Task 2 Deliverables:** Agendas and workshop/meeting notes.

## **Task 3. Preliminary Design**

West Yost will conduct the following engineering evaluations of the Cities' ozone facilities to develop and communicate preliminary design concepts for the Project.

### Review of Historical Ozone System Design and Operating Data

The purpose of this subtask is to familiarize the design team with the available ozone system design documents, operating data, and related documents that can be used to aid the design process. In addition to meeting with NBRWTP Operations and Maintenance Staff, it is anticipated that the following documents will be reviewed as part of this process:

- Up to three years of NBRWTP ozone system SCADA historian data (e.g., NBRWTP flow rate, ozone dose, ozone residual in an electronic, comma-separated or alternative easy-to-import format)
- Available prior reports and studies relevant to the design and operation of the ozone system
- Available and relevant record drawing information
- Relevant and available shop drawing information (where available)

As part of the Project Kickoff Workshop, a site visit will be conducted by the design team with NBRWTP staff to discuss current ozone system operation issues with treatment facilities that will be impacted by this project. The objective of this visit is to better understand how the NBRWTP's

ozone system can be improved in the context of both the existing ozone generators' operations and current generation of ozone generators' ozone gas concentration's likely impacts on gas mixing and dispersion in the ozone contactors.

#### Evaluation of Existing Facility Operations, Equipment, and Improvement Alternatives

Following a review of available historical design and operating data, West Yost will conduct the following evaluations:

- Pre- and Post-Ozone Contactor Operations
- Oxygen Gas Supply and Ozone Gas Pipeline Flow Rate and Control Requirements
- Projected LOX Usage and Required Storage Capacity
- Nitrogen Boost System Capacity
- Ozone Generator Room Gas Supply and Cooling Water Piping Systems
- Evaluate Destruct Unit Systems' Performance and decide if an upgrade is needed
- Suitable Replacement Ozone Generator Equipment (e.g., Manufacturers, Capacity, Quantity)
- Electrical and Control System Requirements for Modified Ozone Systems
- Budgetary Costs for Major Mechanical and Electrical Equipment

The results of the above evaluations will be presented in a Preliminary Design Technical Memorandum (TM).

#### Preliminary Design TM

Based on the results of the above evaluations, West Yost will develop recommended improvements to the NBRWTP ozone generators and pre-ozone contactors' gas transfer system. Possible improvements include, but are not limited to, the following categories:

- Replacement of Existing Ozone Generators
- Modifications to Existing Oxygen Gas Supply and Ozone Gas Pipelines and Appurtenances
- Mechanical and Structural Modifications to Existing Pre- and Post-Ozone Contactors (See Assumptions and Exclusions)
- Electrical and Control System Modifications

Descriptions of the recommended improvements, as well as preliminary design criteria and conceptual drawings, will be presented in a Preliminary Design TM for NBRWTP staff's and Cities' review and comment. Drawings are anticipated to include ozone system process and instrumentation diagrams, and conceptual mechanical and structural plans.

A preliminary opinion of probable construction cost (OPCC) including cost of construction management and engineering services during construction for the recommended improvements will also be developed and submitted with the Preliminary Design TM by early January 2018 to aid the Cities in developing their Fiscal Year 2018/2019 capital improvements budgets. This schedule may change depending on timing of data and information received from the City.

**Task 3 Deliverables:** Draft and Final Preliminary Design TM, Preliminary OPCC.

**Task 4. Detailed Design**

This task includes the development of construction documents for competitive contractor bidding consistent with a design-bid-build project delivery method. It is anticipated that there will be a total of three design submittals (50%, 95%, and Final). Submittal review workshops will be conducted to discuss and obtain NBRWTP staff and Cities' feedback at the 50% and 95% submittal milestones.

50% Design

The 50% Design submittal will reflect additional detail for the concepts and facilities presented in the preliminary design TM submittal. More detailed General, Civil, Structural, Mechanical, Electrical, and Instrumentation drawings will be included in the 50% design submittal. Draft technical specifications will also be prepared for project elements covered under CSI Divisions 01, 03 (if needed), and 11 through 15. An updated OPCC will be prepared based on the 50% drawings.

95% Design

The 95% Design submittal will reflect refinement of the ozone system improvements presented in previous submittals. This submittal is expected to include a mostly-complete set of drawings, and a complete set of draft technical specifications. An updated OPCC will be prepared based on the 95% drawings. Additionally, a conceptual construction schedule will be prepared to aid in the identification of allowable contract time and construction milestones.

Final Design

A Final Design submittal will be prepared based on Cities feedback on the 95% submittal. This submittal will be intended as a complete, biddable set of contract documents, and will be stamped and signed by the responsible engineer(s).

**Task 4 Deliverables:**

- 50% Submittal: Drawings, Selected Preliminary Technical Specifications, OPCC
- 95% Submittal: Drawings, Specifications (Technical and Front End), OPCC, Conceptual Construction Schedule
- Final Submittal: Drawings, Specifications
- All interim design submittals will be provided as electronic (PDF) documents.
- West Yost will provide two (2) hard copies of drawings and specifications in our 50%, 95%, and Final submittals.

## **Task 5. Bid Phase Support Services**

### Pre-Bid Meeting

West Yost will participate in a pre-bid conference convened by the Cities, including an on-site “walk through” with prospective bidders, approximately two weeks prior to bid opening. It is assumed that the Cities will organize and run the meeting and that West Yost would be there to facilitate explanation of the project scope.

### Respond to Bidder Questions

West Yost will assist with responding to questions during the bid phase. It is assumed that questions will be received by and subsequent responses will be communicated through the Cities. Questions from prospective bidders that come directly to West Yost will be re-directed to the Cities for proper documentation and routing.

### Preparation of Addenda

West Yost will assist the Cities with preparing up to two addenda as appropriate to clarify, or revise the Bid Documents in response to questions and clarification requests received during the project bid phase. It is assumed that the Cities will issue addenda to prospective bidders. This scope item assumes the preparation of two addenda.

### Preparation of Conformed Documents.

West Yost will prepare conformed design documents of the construction drawings and specifications to update the construction documents to include contract addenda. The conformed documents will be provided to the Cities for use during construction.

### Task 5 Deliverables:

- Addenda to the Bid Documents (One [1] electronic [PDF] copy for each addendum)
- Conformed Documents (One [1] electronic [PDF] copy)

## **Assumptions and Exclusions**

- The ozone generator improvements project will qualify for exempt status for CEQA documentation purposes. No CEQA services are provided in this proposal.
- Cities’ standard front-end General Conditions and Specifications (Division 00 and Division 01) will be used.
- A building permit will not be required for the ozone generator improvements project.
- The Cities will secure construction period services such as construction management, materials testing, and engineering services during construction through a separate contract at a later date.

Mr. Brandon Hiltman  
September 12, 2017  
Page 6

## PROPOSED BUDGET

West Yost will perform the proposed Scope of Work described above on a time and expenses basis, at the billing rates set forth in West Yost's attached Billing Rate Schedule (Attachment A), with a not-to-exceed budget of \$224,880, as shown in Table 1.

Table 1. Fee Estimate		
Task	Description	Fee, dollars
1	Project Management and QA/QC	21,746
2	Workshops and Meetings	20,878
3	Preliminary Design	50,320
4	Detailed Design	119,408
5	Bid Support Services	12,528
Total		\$224,880

Any additional services not included in this Scope of Work will be performed only after receiving written authorization and a corresponding budget augmentation.

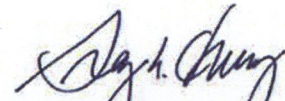
Please do not hesitate to call me if you have any questions or need additional information.

Sincerely,

WEST YOST ASSOCIATES



Craig Thompson, PE #44224  
Principal Engineer



Greg Chung, PE #58710  
Principal-in-Charge

CMT:vw

Attachment A: 2017 Billing Rate Schedule  
Attachment B: Drawing List



# Attachment A

## 2017 Billing Rate Schedule

(Effective January 1, 2017 through December 31, 2017)\*

POSITIONS	LABOR CHARGES (DOLLARS PER HR)
<b>ENGINEERING</b>	
Principal/Vice President	\$258
Engineering/Scientist/Geologist Manager I / II	\$237 / \$248
Principal Engineer/Scientist/Geologist I / II	\$216 / \$229
Senior Engineer/Scientist/Geologist I / II	\$193 / \$203
Associate Engineer/Scientist/Geologist I / II	\$172 / \$184
Engineer/Scientist/Geologist I / II	\$139 / \$161
Engineering Aide	\$78
Administrative I / II / III / IV	\$71 / \$89 / \$108 / \$118
<b>ENGINEERING TECHNOLOGY</b>	
Engineering Tech Manager I / II	\$244 / \$254
Principal Tech Specialist I / II	\$225 / \$235
Senior Tech Specialist I / II	\$207 / \$216
Senior GIS Analyst	\$189
GIS Analyst	\$178
Technical Specialist I / II / III / IV	\$131 / \$150 / \$169 / \$188
CAD Manager	\$150
CAD Designer I / II	\$116 / \$130
<b>CONSTRUCTION MANAGEMENT</b>	
Senior Construction Manager	\$246
Construction Manager I / II / III / IV	\$150 / \$161 / \$171 / \$214
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$130 / \$145 / \$161 / \$167
Apprentice Inspector	\$118
CM Administrative I / II	\$64 / \$86

- Technology and Communication charges including general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses will be billed at 6% of West Yost labor.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- Mileage will be billed at the current Federal Rate and Travel will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

\* This schedule is updated annually

## 2017 Billing Rate Schedule (continued)

(Effective January 1, 2017 through December 31, 2017)\*

### Equipment Charges

EQUIPMENT	BILLING RATES
Gas Detector	\$80/day
Hydrant Pressure Gage	\$10/day
Hydrant Pressure Recorder, Standard	\$40/day
Hydrant Pressure Recorder, Impulse (Transient)	\$55/day
Trimble GPS – Geo 7x	\$220/day
Vehicle	\$10/hour
Water Flow Probe Meter	\$20/day
Water Quality Multimeter	\$185/day
Well Sounder	\$30/day

\* This schedule is updated annually

## **North Bay Regional Water Treatment Plant - Ozone System Improvements**

### **Draft Drawing List**

- G-1 Title Sheet, Location & Plant Maps, List of Drawings
- G-2 Abbreviations, Legend, Piping Symbols & Pipe Schedule
- G-3 Design Criteria & Process Flow Schematic
  
- C-1 Contractor Staging and Work Areas
- C-2 Oxygen Supply, Ozone Generation, Gas Transfer and Destruct Systems - Plan
  
- S-1 Structural General Notes
- S-2 Structural Details
  
- M-1 Mechanical Details 1
- M-2 Mechanical Details 2
- M-3 Ozone Generator Building Modifications - Mechanical Plan
- M-4 Ozone Generator Building Modifications - Mechanical Sections & Details
- M-5 Ozone Generator Building Modifications - Schematic Diagram
- M-6 Ozone Injection System - Plan & Sections
- M-7 Ozone Injection System - Details
- M-8 Pre-ozone Contactor Off-Gas Ozone Destruction System - Plan & Section
  
- E-1 ELECTRICAL SYMBOLS & ABBREVIATIONS
- E-2 480V MAIN SWGR 8LVSB ONE LINE DIAGRAM
- E-3 480V MAIN SWGR 8LVSB ELEVATION
- E-4 MCC-8M (PRE OZONE) ONE LINE DIAGRAM
- E-5 MCC-8M (PRE OZONE) ELEVATION
- E-6 MCC-8EMB ONE LINE DIAGRAM
- E-7 MCC-8EMB ELEVATION
- E-8 OZONE PANELBOARD SCHEDULE
- E-9 CONDUIT SCHEDULE A
- E-10 CONDUIT SCHEDULE B
- E-11 MISCELLANEOUS ELEMENTARY DIAGRAM
- E-12 EXAMPLE INTERCONNECT DIAGRAM
- E-13 TYPICAL ELECTRICAL DETAILS NO. 1
- E-14 TYPICAL ELECTRICAL DETAILS NO. 2
- E-15 ELECTRICAL SITE PLAN
- E-16 OZONE GENERATOR BUILDING ELECTRICAL POWER PLAN 1
- E-17 OZONE GENERATOR BUILDING ELECTRICAL POWER PLAN 2
- E-18 OZONE GENERATOR BUILDING MCC ROOM
  
- I-1 INSTRUMENTATION SYMBOLS & ABBREVIATIONS
- I-2 OZONE GENERATION FACILITY OVERVIEW P&ID
- I-3 PRE OZONE CONTACT BASIN P&ID (TYP)
- I-4 OZONE GENERATOR P&ID (TYP)
- I-5 AUXILIARY P&ID

## **EXHIBIT "B"**

### **PAYMENT**

1) The total contract price for services rendered by CONSULTANT under this Agreement shall be for a not-to-exceed amount of \$224,880.

2) Payment shall be made to CONSULTANT on a time and materials basis, and CONSULTANT shall submit monthly invoices to the Assistant Public Works Director/Utilities for the same.

3) Any additional meetings or work required beyond that set forth in Exhibit "A" shall be mutually agreed to in writing by the CITY and CONSULTANT, and shall be billed on a time and materials basis.

## EXHIBIT "C"

### GENERAL PROVISIONS

1) INDEPENDENT CONSULTANT. At all times during the term of this Agreement, CONSULTANT shall be an independent contractor and shall not be an employee of CITY. CITY shall have the right to control CONSULTANT only insofar as the results of CONSULTANT's services rendered pursuant to this Agreement; however, CITY shall not have the right to control the means by which CONSULTANT accomplishes services rendered pursuant to this Agreement.

2) LICENSES; PERMITS; ETC. CONSULTANT represents and warrants to CITY that CONSULTANT has all licenses, permits, qualifications, and approvals of whatsoever nature which are legally required for CONSULTANT to practice CONSULTANT's profession. CONSULTANT represents and warrants to CITY that CONSULTANT shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any licenses, permits, and approvals which are legally required for CONSULTANT to practice his profession.

3) TIME. CONSULTANT shall devote such services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of CONSULTANT's obligations pursuant to this Agreement. CONSULTANT shall adhere to the Schedule of Activities as described in their Executive Summary.

4) CONSULTANT NOT AN AGENT. Except as CITY may specify in writing, CONSULTANT shall have no authority, express or implied, to act on behalf of CITY in any capacity whatsoever as an agent. CONSULTANT shall have no authority, express or implied, pursuant to this Agreement, to bind CITY to any obligation whatsoever.

5) ASSIGNMENT PROHIBITED. No party to this Agreement may assign any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.

6) PERSONNEL. CONSULTANT shall assign only competent personnel to perform services pursuant to this Agreement. In the event that CITY, in its sole discretion, at any time during the term of this Agreement, desires the removal of any person or persons assigned by CONSULTANT to perform services pursuant to this Agreement, CONSULTANT shall remove any such person immediately upon receiving notice from CITY of the desire of CITY for the removal of such person or persons.

7) STANDARD OF PERFORMANCE. CONSULTANT shall perform all services required pursuant to this Agreement. Services shall be performed in the manner and according to the standards observed by a competent practitioner of the profession in which CONSULTANT is engaged in the geographical area in which CONSULTANT practices his profession. All products which CONSULTANT delivers to CITY pursuant to this Agreement shall be prepared in a workmanlike manner, and conform to the standards of quality normally observed by a person practicing in CONSULTANT's profession. CITY shall be the sole judge as to whether the product of the CONSULTANT is satisfactory.

8) CANCELLATION OF AGREEMENT. This Agreement may be canceled at any time by the CITY at its discretion upon written notification to CONSULTANT. CONSULTANT is entitled to receive full payment for all services performed and all costs incurred up to and including the date of receipt of written notice to cease work on the project. CONSULTANT shall be entitled to no further compensation for work performed after the date of receipt of written notice to cease work. All completed and incomplete products up to the date of receipt of written notice to cease work shall become the property of CITY.

9) PRODUCTS OF CONSULTING. All products of the CONSULTANT provided under this Agreement shall be the property of the CITY.

Notwithstanding anything to the contrary in this section, the CITY hereby agrees to indemnify, defend, and hold harmless the CONSULTANT from any claims to the extent arising out of the CITY's or any third party's reuse or use of CONSULTANT's work for any project other than the project for which CONSULTANT is engaged pursuant to this Agreement, or for any use of CONSULTANT's work for this project, where the services set forth in Exhibit "A" are completed by third parties.

10) INDEMNIFY AND HOLD HARMLESS.

a) If AGREEMENT is an agreement for design professional services subject to California Civil Code § 2782.8(a) and CONSULTANT is a design professional, as defined in California Civil Code § 2782.8(c)(2), to the fullest extent allowed by law, CONSULTANT shall hold harmless, defend and indemnify the CITY, its officers, agents, employees, and volunteers from and against all claims, damages, losses, and expenses including attorneys' fees arising out of, or pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, except where caused by the active negligence, sole negligence, or willful misconduct of the CITY.

b) If AGREEMENT is not an agreement for design professional services subject to California Civil Code § 2782.8(a) or CONSULTANT is not a design professional as defined in subsection (a) above, to the fullest extent allowed by law, CONSULTANT shall indemnify, defend, and hold harmless the CITY, its officers, agents, employees and volunteers from all claims, suits, or actions of every name, kind and description, brought forth on account of injuries to or death of any person or damage to property arising from or connected with the willful misconduct, negligent acts, errors or omissions, ultra-hazardous activities, activities giving rise to strict liability, or defects in design by CONSULTANT or any person directly or indirectly employed by or acting as agent for CONSULTANT in the performance of this Agreement, including the concurrent or successive passive negligence of the CITY, its officers, agents, employees or volunteers.

It is understood that the duty of CONSULTANT to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code.

Acceptance of insurance certificates and endorsements required under this Agreement does not relieve CONSULTANT from liability under this indemnification and

hold harmless clause. This indemnification and hold harmless clause shall apply whether or not such insurance policies are determined to be applicable to any such damages or claims for damages.

CONSULTANT'S responsibility for such defense and indemnity shall survive termination or completion of this agreement for the full period of time allowed by law.

11)PROHIBITED INTERESTS. No employee of the CITY shall have any direct financial interest in this agreement. This agreement shall be voidable at the option of the CITY if this provision is violated.

12)LOCAL EMPLOYMENT POLICY. The CITY desires wherever possible, to hire qualified local residents to work on city projects. Local resident is defined as a person who resides in Solano County. The CITY encourages an active affirmative action program on the part of its contractors, consultants, and developers. When local projects require, subcontractors, contractors, consultants and developers will solicit proposals from qualified local firms where possible.

As a way of responding to the provisions of the Davis-Bacon Act and this program, contractor, consultants, and developers will be asked, to provide no more frequently than monthly, a report which lists the employee's name, job class, hours worked, salary paid, city of residence, and ethnic origin.

13)CONSULTANT NOT A PUBLIC OFFICIAL. CONSULTANT is not a "public official" for purposes of Government Code §§ 87200 et seq. CONSULTANT conducts research and arrives at his or her conclusions, advice, recommendation, or counsel independent of the control and direction of the CITY or any CITY official, other than normal contract monitoring. In addition, CONSULTANT possesses no authority with respect to any CITY decision beyond these conclusions, advice, recommendation, or counsel.

14)EMPLOYMENT DEVELOPMENT DEPARTMENT REPORTING REQUIREMENTS. When the CITY executes an agreement for or makes payment to CONSULTANT in the amount of \$600 (six hundred dollars) or more in any one calendar year, CONSULTANT shall provide the following information to CITY to comply with Employment Development Department (EDD) reporting requirements:

a) Whether CONSULTANT is doing business as a sole proprietorship, partnership, limited liability partnership, corporation, limited liability corporation, non-profit corporation or other form of organization.

b) If CONSULTANT is doing business as a sole proprietorship, CONSULTANT shall provide the full name, address and social security number or federal tax identification number of the sole proprietor.

c) If CONSULTANT is doing business as other than a sole proprietorship, CONSULTANT shall provide CONSULTANT'S federal tax identification number.

## EXHIBIT "D"

### INSURANCE REQUIREMENTS

CONSULTANT shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the CONSULTANT, its agents, representatives, or employees.

#### 1) MINIMUM SCOPE AND LIMITS OF INSURANCE

a) Commercial General Liability coverage (occurrence Form CG 00 01) with minimum limits of \$1,000,000 per occurrence for bodily injury, personal injury, products and completed operations, and property damage. If Commercial General Liability or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

b) Automobile Liability coverage (Form CA 00 01 with Code 1 – any auto) with minimum limits of \$1,000,000 per accident for bodily injury and property damage.

c) Workers' Compensation insurance as required by the State of California and Employers' Liability insurance, each in the amount of \$1,000,000 per accident for bodily injury or disease.

#### 2) INDUSTRY SPECIFIC COVERAGES

If checked below, the following insurance is also required.

- ☒ Professional Liability Insurance / Errors and Omissions Liability in the minimum amount of \$1,000,000 per occurrence.
- ☐ Pollution Liability Insurance in the minimum amount of \$1,000,000 per occurrence
- ☐ Garage Keepers Insurance in the minimum amount of \$1,000,000 per occurrence
- ☐ Fidelity / Crime / Dishonesty Bond in the minimum amount of \$ \_\_\_\_\_
- ☐ MCS-90 Endorsement to Business Automobile insurance for transportation of hazardous materials and pollutants
- ☐ Builder's Risk / Course of Construction Insurance in the minimum amount of \$ \_\_\_\_\_.

### 3) INSURANCE PROVISIONS

a) DEDUCTIBLES AND SELF-INSURED RETENTIONS. Any deductibles or self-insured retentions must be declared to and approved by the CITY. At the option of the CITY, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the CITY, its officers, officials, employees and volunteers; or the CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

b) The general and automobile liability policies (and if applicable, pollution liability, garage keepers liability and builder's risk policies) are to contain, or be endorsed to contain, the following provisions:

- i) The CITY, its officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of work or operations performed by or on behalf of the CONSULTANT; products and completed operations of the CONSULTANT; premises owned, occupied or used by the CONSULTANT; and automobiles owned, leased, hired or borrowed by the CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to the CITY, its officers, officials, employees or volunteers.
- ii) For any claims related to this project, the CONSULTANT'S insurance coverage shall be primary insurance as respects the CITY, its officers, officials, employees and volunteers. Any insurance or self-insured maintained by the CITY, its officers, officials, employees or volunteers shall be excess of the CONSULTANT'S insurance and shall not contribute with it.
- iii) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the CITY, its officers, officials, employees or volunteers.
- iv) The CONSULTANT'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- v) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the CITY.
- vi) The policy limits of coverage shall be made available to the full limits of the policy. The minimum limits stated above shall not serve to reduce the CONSULTANT'S policy limits of coverage. Therefore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement, or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

c) ACCEPTABILITY OF INSURER. Insurance is to be placed with insurers with a

current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the CITY.

d) VERIFICATION OF COVERAGE. CONSULTANT shall furnish the CITY with original endorsements effecting coverage required by this Exhibit D. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by the CITY or on forms equivalent to CG 20 10 11 85 subject to CITY approval. All insurance certificates and endorsements are to be received and approved by the CITY before work commences. At the request of the CITY, CONSULTANT shall provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications.

e) SUB-CONTRACTORS. CONSULTANT shall require all subcontractors to procure and maintain insurance policies subject to the requirements of Exhibit D. Failure of CONSULTANT to verify existence of sub-contractor's insurance shall not relieve CONSULTANT from any claim arising from sub-contractors work on behalf of CONSULTANT.